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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/616,790	07/10/2003	John E. Holland	3781-26(37.2)	2004

7590 08/29/2005

VIRGINIA SZIGETI  
HONEYWELL INTERNATIONAL, INC.  
15801 WOODS EDGE ROAD  
LAW DEPARTMENT  
COLONIAL HEIGHTS, VA 23834

EXAMINER

SINGH, ARTI R

ART UNIT PAPER NUMBER

1771

DATE MAILED: 08/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

*HE*

**Office Action Summary**

**Application No.**

10/616,790

*pw*

**Applicant(s)**

HOLLAND ET AL.

**Examiner**

Ms. Arti Singh

**Art Unit**

1771

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☐ Claim(s) \_\_\_\_ is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4/14/2005
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_

## DETAILED ACTION

### *Response to Amendment*

1. The Examiner has carefully considered Applicant's amendments and accompanying remarks dated 06/13/05. Applicant's amendments to claims 1,3,1-13,16-20,23,24, and 26-28 have all been entered. The IDS submitted on 04/14/05 has also been reviewed and is being remitted herewith. Applicant's traversal regarding the restriction requirement appears flawed. Applicant's counsel elected without traverse over the phone, and further the Examiner has shown that the groups are distinct by explaining the same product could be by a materially different process, e.g. made by coextruding the coating layers. Further, the method claims have different classification and would require a different search. Thus, the requirement is still deemed proper and is therefore made FINAL. In an event that this Application is deemed allowable the Examiner will rejoin the method claims, however that is not the case at this time in the prosecution.
2. With regard to the Double Patenting rejection, the arguments are found to be persuasive and that specific rejection is now withdrawn.
3. With regard to the art rejection made under 35 USC 103, Applicant's arguments are also found to be convincing and are thus withdrawn.

### *Claim Rejections - 35 USC § 103*

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. Claims 1-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 3532179 issued to McCreary in view of USPN 6280546 issued to Holland further in view of USPN 3661692 issued to Berczi.

6. McCreary discloses an air cushion vehicle skirt with an air chamber. The skirt is made from flexible materials, which may be impregnated with a thermoplastic or polyethylene film (column 7 and 8). McCreary does not teach using the UHMWP, or outer coating layer to be rubber.

Holland discloses using high performance UHMWP's in their fabric composites. The fabric is laminated with multiple layers of thermoplastics films, which may be polyethylene or EVA 7-8 mils thick. Therefore a skilled artisan at the time the invention was made would have found it obvious to have employed the high performance yarns of Holland in the fabric used to make the composite of McCreary, motivated by the reasoned expectation of providing a high strength abrasion resistant composite. Holland also teaches the yarns to be 17\*17 or 34\*34 yarns per inch having a linear density of 1200 D.

Holland and McCreary both show multiple thermoplastic coating layers but neither explicitly suggests the use of rubber for their outer coating layer. The teachings of Berczi disclose making hovercrafts skirts which are flexible and made of coated fabrics. In column 3, line 36-50 Berczi teaches that elastomeric coatings of natural and synthetic rubber may be applied to the outer layer of the skirt. Therefore a skilled artisan would have found it obvious at the time the invention was made to have employed the rubber coating of Berczi as the outermost coating in the abrasion resistant composites of either Holland or McCreary. One would have been motivated to use rubber as the outermost coating layer to provide increased abrasion resistance in certain area of the skirt as shown in column 3, line 47 of Berczi.

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With regard to the preferred coating weights and thicknesses, the Examiner takes the position that a skilled artisan would have found it obvious to have used the weights desired by Applicant, since it has been held that discovering an optimum value involves only routine skill in the art. In re Boesch, 617 F. 2d 272, 205 USPQ 215 (CCPA 1980). Further a skilled artisan would only have found it obvious to choose a specific coating weight motivated by the reasoned expectation of not wanting their composite to delaminate, or in the alternative to provide a specific thickness in area where there is increase abrasion such as the outer under surface of the skirt.

With regard to the Taber Abrasion resistance Test, it is the Examiner's position that if the chemical and structural limitations are met, then they would also produce the same test results as desired by Applicant.

### ***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

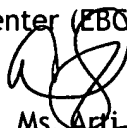
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ms. Arti Singh whose telephone number is 571-272-1483. The examiner can normally be reached on M-F 9-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ms. Arti Singh  
Primary Examiner  
Art Unit 1771

Ars 08/22/05